JEDI II: JOBS AND ECONOMIC DEVELOPMENT IMPACTS FROM COAL, NATURAL GAS, AND WIND POWER

Suzanne Tegen

National Renewable Energy Laboratory Golden, Colorado

Marshall Goldberg

MRG & Associates Nevada City, California

Michael Milligan, Consultant

National Renewable Energy Laboratory Golden, Colorado

tool, go to

To download this user-friendly free

Please see the paper accompanying

this poster in the AWEA conference

proceedings for more information

and sample results.

www.windpoweringamerica.gov

How does JEDI II work?

The user enters data specific to the new coal, gas, or wind plant:

- Year of installation
- Size of the project
- Location
- Cost (\$/kW)
- Any other site-specific information

The more information the user provides, the more localized the results will be. When specific data are not available, the model uses default values.

Features

- JEDI II is for all levels of users no experience with economic modeling or spreadsheets is necessary.
- JEDI II comes with on-line instructions.
- Default data is available if users do not have area-specific information.
- The output from JEDI II provides detailed construction and O&M expenditure information, as well as the portion spent locally.
- The model identifies local spending on debt and equity payments, property taxes and land-lease payments.
- The user may add in county or regional data to make the model more useful for their needs.
- JEDI II calculates direct, indirect, and induced impacts.

Approach

- Using economic multipliers, JEDI II measures the potential employment (jobs and earnings) and economic development impacts (output) from new power plants by calculating the dollar flow from construction and annual operations.
- In its default form, JEDI II conducts state-specific analyses. County or regional analyses require additional multipliers.

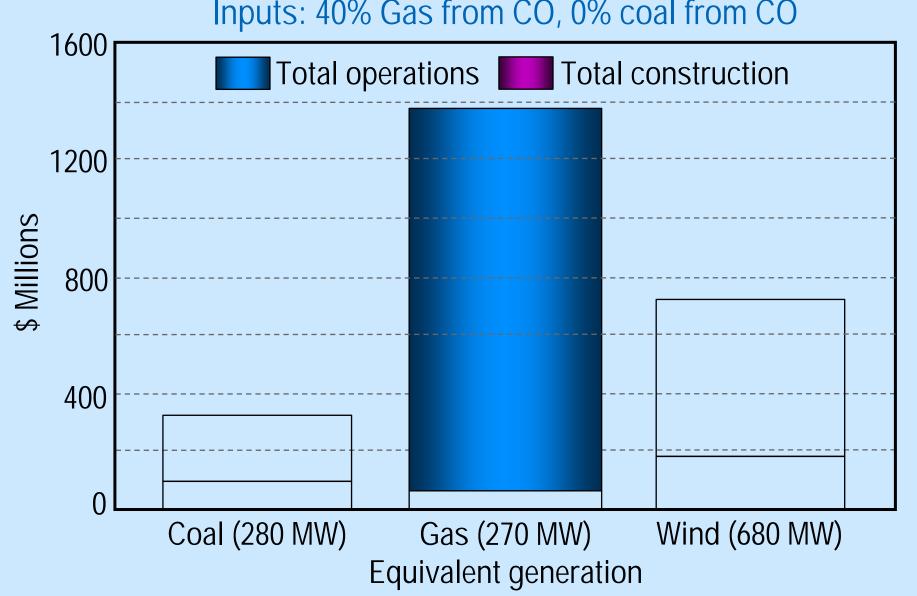
Sample Input Screen

This is just one example of the input screens JEDI II calculates for new power plants.

Sample Output Screen

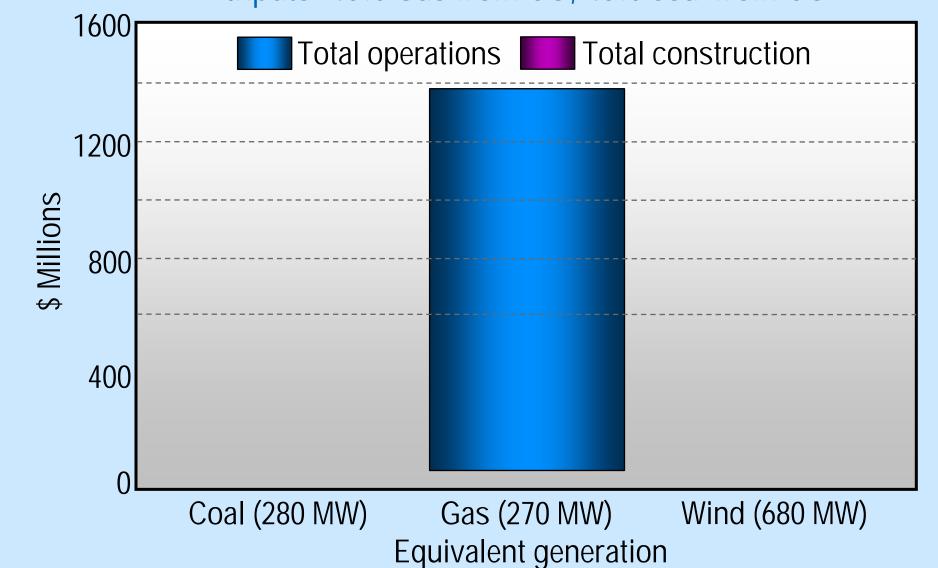
Statewide Economic Impacts from New Electricity Generation in Colorado

Construction + 20 years of operation (\$2005) Inputs: 40% Gas from CO, 0% coal from CO



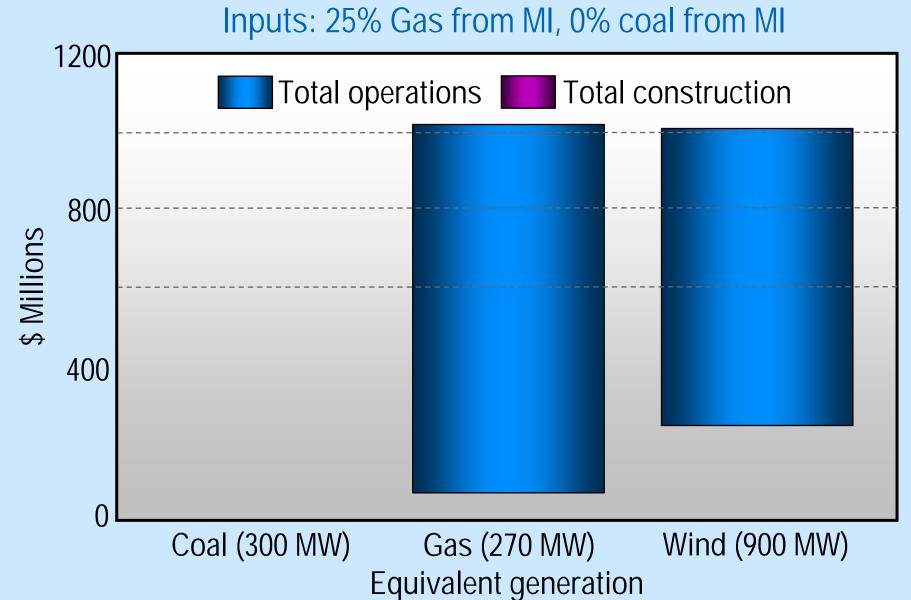
Statewide Economic Impacts from New Electricity Generation in Colorado

Construction + 20 years of operation (\$2005) Inputs: 40% Gas from CO, 40% coal from CO



Statewide Economic Impacts from New Electricity Generation in Michigan

Construction + 20 years of operation (\$2005) Inputs: 25% Gas from ML 0% coal from ML



The JEDI model does not factor in costs to consumers. Fluctuations in different technologies (e.g., natural gas prices) may make construction of a new power plant price prohibitive.